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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,484	08/15/2006	Jordi Relats	27613U	8345
20529	7590	04/28/2009		
THE NATH LAW GROUP 112 South West Street Alexandria, VA 22314			EXAMINER	
			WORRELL JR, LARRY D	
			ART UNIT	PAPER NUMBER
			3765	
			MAIL DATE	DELIVERY MODE
			04/28/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/589,484	<b>Applicant(s)</b> RELATS ET AL.
	<b>Examiner</b> Danny Worrall	<b>Art Unit</b> 3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-7 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-7 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: Weaving and knitting are two clearly different processes, machines and products. As such a clear distinction between the two should be maintained. Therefor, the terms "weave" "weaving", etc should be changed to "knit", "knitting", "interknit" etc since applicant's product is knit tube. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "weave" is accurate since the resultant product is knit. The term "weft course" is unclear. Is this a weft inlay yarn?

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 insofar as definite are rejected under 35 U.S.C. 103(a) as being unpatentable over Relats et al (6854298) in view of Akers et al (6711920).

The disclosure of Relats et al (6854298) teaches the invention substantially as claimed as seen for example in the embodiment of figure 3 including a flexible protective tube comprising at least two different yarns (1 and 2) characterized in that some first yarns (1) form a “weave” of weft courses combined with stitch courses. Also not the second (2) forms a similar “weave” of weft courses combined with stitch courses. The disclosure of Relats et al (6854298) does not set forth a plurality of larger diameter zones and smaller diameter zones which are alternated along the length of the tube. The disclosure of Akers et al (6711920) teaches a flexible protective tube which as seen in figure 1 includes larger diameter zones (20) and smaller diameter zones (12) which are alternated along the length of the tube. It would have been obvious at the time the invention was made to provide the protective knitted tube of Relats et al with smaller and larger segments as shown by Akers et al in order to provide radial stiffness and bending flexibility as set forth by Akers et al in column 1, lines 30-37. Re claims 5-7, while the disclosure of Relats et al teaches a range of yarn sizes between .15 and .3 mm and a tex of 230-200, it does not teach expressly set forth the specific yarn sizes of .22mm, .20 mm or 330 dtex. It would have been

obvious at the time the invention was made to choose from a number of different yarns sizes including .22mm .20mm and 330 dtex since the disclosure of Relets et al suggests such yarns sizes given the disclosed range of .15 and .3 mm and since such a modifications would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Concerning a third yarn forming chain stitches, as seen in figure 5 Relats et al shows an additional third yarn which includes a chain stitch. One of ordinary skill in the art knows that chain stitches are a primary base knit structure for warp knit fabrics. It would have been obvious at the time the embodiment of figure 3 was made to provide the embodiment of figure 3 with a third yarn formed as chain stitches in order to increase the structural integrity of the knitted tube and to increase the abrasion resistance of the knitted tube via the additional yarn.

#### *Response to Arguments*

Applicant's arguments filed 1/8/09 have been fully considered but they are not persuasive. Concerning the objection to the specification and 112 rejection, clearly the terminology as used by applicant confuses the issue of the structure being disclosed and claimed. Applicant's article is knitted yet applicant continues to claim to the fabric as woven. Moreover, applicant's use of the term "weft" in relation to "weave" further confuses the disclosed structure. When referencing weaving, the weft or filling yarns are those yarns inserted widthwise between raised and lowered warp yarns. However, in the case of knitting "weft" is one of two types of knitting namely "weft knitting" and "warp knitting". Additionally within warp knitting the term "weft" may reference a direction of movement of a yarn namely the widthwise direction.

Applicant's figures show a warp knit structure which includes warp knitted chain stitch (6) and a warp yarn (4) which is laid-in through a weft direction. It is not weft knitted or woven. As such applicant's specification is confusing and the claims are indefinite. US 6,854,298 use of the term "weave" within the specification is clear as to the structure being disclosed and claimed. US 6,854,298 does not claim any type of woven structure. Concerning applicant's argument that Relats does not show "some first yarns form a weave of weft courses combined with stitch courses", it is clear the yarn (1) in figure 3 of Relats shows such a structure insofar as definitely claimed by applicant. The stitch shown by Relats has a "weft" direction component as well as a "stitch component" and as such meets the claimed limitations. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as expressly set forth by Akers et al in column 1, lines 30-37, that smaller and larger segments provide radial stiffness and bending flexibility.

#### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Worrell whose telephone number is 571/272-4997. The examiner can normally be reached on MONDAY-THURSDAY.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GARY WELCH can be reached on 571/272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Danny Worrell/  
Primary Examiner, Art Unit 3765

LDW